



Previous Names: Shell Albida Grease MDX 1, Shell Retinax MDX 1

# Shell Gadus S3 V460XD 1

- Heavy Duty Protection
- High Temperature
- Lithium Complex

*Premium multipurpose heavy duty grease with extra solids*

Shell Gadus S3 V460XD Greases are premium heavy-duty greases designed for use in a wide range of industrial and mining applications.

They are based on a high viscosity index mineral oil and lithium complex soap thickener. They contains selected additives to offer excellent high temperature oxidation performance and enhanced extreme pressure, antiwear and anti-corrosion properties. They also contains molybdenum disulfide to provide additional resistance to shock loading.

## DESIGNED TO MEET CHALLENGES

### Performance, Features & Benefits

- **Wide operating temperature range**  
Ball and rolling element bearings operating continuously at temperatures between -15°C and + 150°C.
- **Prolonged grease service life**  
Enhanced oxidation resistance prolongs grease life at higher temperatures, allowing extended re-greasing intervals.
- **Excellent mechanical stability**  
Maintains consistency over long periods even in the most severe conditions.
- **For shock loaded conditions**  
Resists break down, softening and subsequent leakage under shock loads.
- **Enhance extreme pressure and antiwear properties**  
Rig tests confirm E.P. additives in Shell Gadus S3 V460XD prolong the life of bearings subject to heavy loads and shock loads.
- **Low water wash-out**  
Good water resistant properties.
- **Effective corrosion protection**  
Ensures components/bearings do not fail due to corrosion.

### Main Applications



Shell Gadus S3 V460XD Greases are used for the lubrication of shock loaded, heavy-duty slow moving bearings and non-bearing applications such as those found in large mobile mining equipment. Shell Gadus S3 V460XD greases available as NLGI 2 grease and also as an NLGI 1 version where a more pumpable grease is required.

### Specifications, Approvals & Recommendations

- Komatsu
- Komatsu Trucks
- Terex
- Liebherr Trucks
- P&H
- BE (certified)
- Caterpillar (exceeds specification)

For a full listing of equipment approvals and recommendations, please consult your local Shell Technical Helpdesk.

## Typical Physical Characteristics

Properties		Method	Shell Gadus S3 V460XD 1	
NLGI Consistency			1	
Cone Penetration, Worked	@25°C	ASTM D17 (dmm)	310-340	
color			Black	
Soap Type			Lithium complex	
Base Oil Type			Mineral	
Kinematic Viscosity	@40°C	mm <sup>2</sup> /s	ASTM D445	460
Kinematic Viscosity	@100°C	mm <sup>2</sup> /s	ASTM D445	31
4 Ball EP Test		Kg	IP 239	620
Dropping Point		°C	IP 396	250
Molybdenum Disulfide Content		%		5
Molybdenum Disulfide Particle Size		Microns		<5

These characteristics are typical of current production. While future production will conform to Shell's specification, variations in these characteristics may occur.

## Health, Safety & Environment

### Health and Safety

Shell Gadus S3 V460XD Grease is unlikely to present any significant health or safety hazard when properly used in the recommended application and good standards of personal hygiene are maintained.

Avoid contact with skin. Use impervious gloves with used oil. After skin contact, wash immediately with soap and water.

Guidance on Health and Safety is available on the appropriate Material Safety Data Sheet, which can be obtained from <http://www.epc.Shell.com/>

### Protect the Environment

Take used oil to an authorized collection point. Do not discharge into drains, soil or water.

## Additional Information

### Advice

-20°C to +140°C (peak 150°C)

### Advice

Advice on applications not covered here may be obtained from your Shell representative.

